

Update on Fish Tissue Study August Session

Portland Harbor Pre-Design Investigation (PDI)

August 30, 2018

Summary of August 2018 SMB Sampling

- August 13-24 (11 days)
- 2 fishing vessels
- Staff included boat captains (who also fished), 2 bass club anglers, 2 AECOM scientists, 2 CDMSmith observers
- Rod and reel with bass lure
- Fished throughout PHSS and D/U reach
- All 135 locations sampled once, 40 sampled second time



Tally of Fish Caught

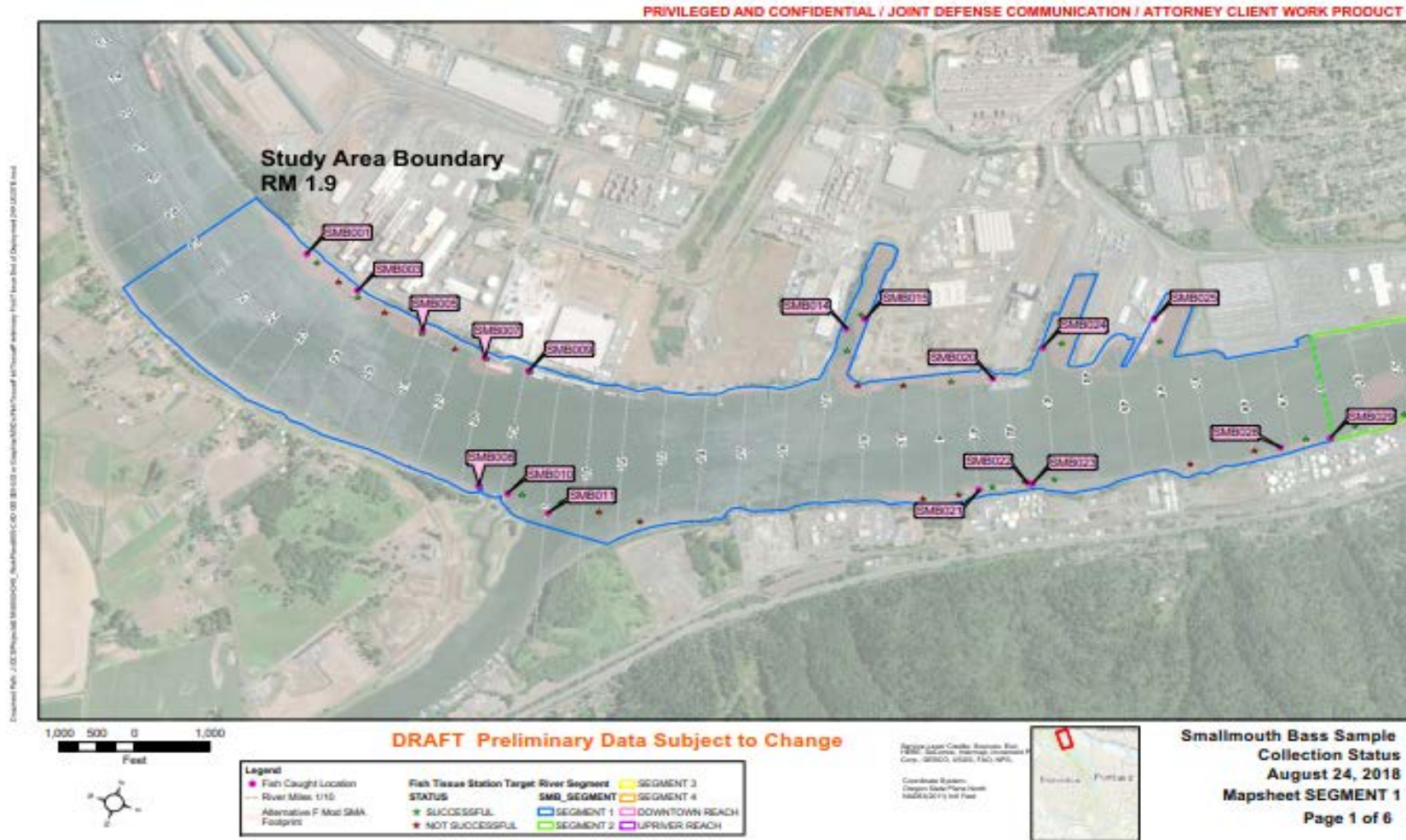
Total SMB Caught	153
Total SMB Kept (Target Size)	101*
Locations in PHSS	68/95
Locations in Downtown Reach	17/20
Locations in Upriver Reach	15/20
Total Non-Target Species Caught	8
Total ESA Species Caught	0



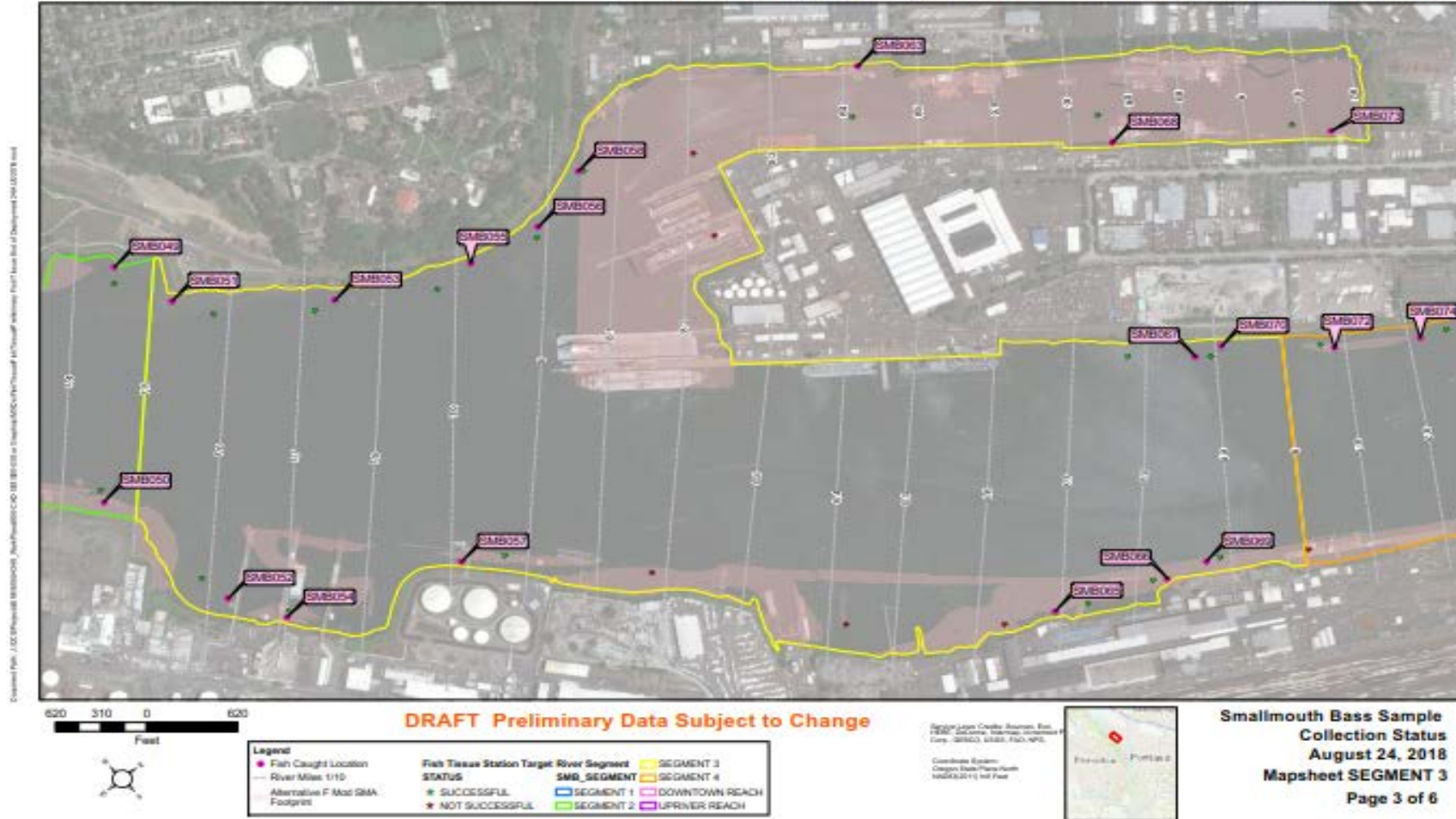
Based on total of 105.5 fishing hours
and catch of 101 target size SMB:
Catch per Unit Effort (CPUE) = 0.96

* Includes 2 SMB caught same time at SMB105 (Downtown Reach)

Catch Locations









Agency: Janet Casella, Research, Eval.
F&M, Baltimore, Insurance Investment
Corp. 20000, 20000, 20000, 20000

**Essential Systems:
Champion Master Flame Heat
Model 8-20-Vtg Infil Flow**



Legend

Fish Caught Location	Fish Tissue Station Target	River Segment	SEGMENT 3
River Miles 1/10	STATUS	SMD_SEGMENT	SEGMENT 4
Capped Areas	SUCCESSFUL	SEGMENT 1	DOWNTOWN REACH
Alternative F Most SMD Footprint	NOT SUCCESSFUL	SEGMENT 2	UPRIVER REACH



Transmembrane Protein 105 (TMEM105) is a transmembrane protein that is highly expressed in the brain and is involved in various cellular processes, including cell adhesion, signaling, and protein trafficking. It is a member of the TMEM100 family of proteins, which are characterized by their transmembrane domain and their ability to form a complex with the protein TMEM106. TMEM105 is also known to interact with the protein TMEM107, which is involved in the regulation of the cell cycle. The expression of TMEM105 is increased in certain types of cancer, such as breast cancer and colorectal cancer, and it has been suggested that it may play a role in the progression of these diseases. In addition, TMEM105 has been shown to be involved in the regulation of the immune system, particularly in the context of T cell activation and differentiation. Overall, TMEM105 is a multifunctional protein that plays a critical role in various cellular processes and is a potential target for therapeutic intervention in certain types of cancer and immune-related disorders.



Supplier/layer credits: Source: East
P&H, 2nd floor, 1st main entrance
Comp. 100000, 10000, 10000, 10000

Customer System:
Oregon State Police North
100000, 10000, 10000, 10000



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Looking Ahead to September Session

- Continue rod & reel angling focusing on remaining locations
- Target data gaps, two revisits per station
- Of 35 remaining, 10 have been unsuccessful twice:
 - Poor/no habitat
 - Blocked/limited access
- Per FSP, recommend moving to alternate location with suitable habitat and fill spatial data gap

Sample Location ID	Segment	Comment
SMB060	2	Blocked by vessel, deep water, no shoreline
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SMB071	1	Blocked by vessel, deep water, no shoreline
SMB080	1	Deep water, seawall
SMB082	1	Deep water, seawall
SMB102	Downtown	Busy marina, limited habitat
SMB110	Downtown	Limited habitat, no cover
SMB113	Downtown	Limited habitat, no cover
SMB117	Upriver	Busy marina, limited habitat
SMB120	Upriver	Poor habitat with little to no current, structure or cover